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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,874	08/10/2006	Thomas Blaffert	2004P00429WOUS	7335
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PHILIPS INTELLECTUAL PROPERTY & STANDARDS				
P. O. Box 3001				
BRIARCLIFF MANOR, NY 10510				
EXAMINER				
PATEL, NIRAV G				
ART UNIT		PAPER NUMBER		
2624				
NOTIFICATION DATE		DELIVERY MODE		
11/02/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/597,874

**Applicant(s)**

BLAFFERT ET AL.

**Examiner**

Nirav G. Patel

**Art Unit**

2624

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 14 October 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-20.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: See Continuation Sheet.

/Nirav G. Patel/  
Examiner, Art Unit 2624

/Brian P. Werner/  
Primary Examiner, Art Unit 2624

Continuation of 11. does NOT place the application in condition for allowance because:

Regarding Claim 1, the applicants assert that the Ko reference uses the sternum, vertebra, trachea and the lungs as the registered object constituents in the trend control of tumors (Ko's predetermined task). As such, during the trend control, only the lungs are considered the relevant constituents.

Examiner's Response - After reviewing the cited portion in the Ko reference by the applicants in the remarks dated 10/14/2011 (Ko Page 270, Cols. 1 & 2, particularly the section titled "Analysis of change over time"), the Examiner submits the following:

The portions of Ko relied upon to reject the limitation in question ("...register only those image areas...") relies upon the section titled "Analysis of consecutive CT sections with three-dimensional techniques." It is within this section where Ko teaches using the trachea. The Examiner relied upon the registering of the trachea as registering it as the only object registered as it is relevant to the task.

Reading the title of the section alone, one sees that the images being registered are consecutive images (one right after another).

Thus, Ko registers consecutive CT images using the trachea as the landmark.

Ko further teaches, as the applicants have included an excerpt in the response dated 10/14/2011, pages 5-6, that "...in a patient's initial CT study, the computer identified a possible matching image and two surrounding images in the follow-up CT study. This was performed with use of centroids of anatomic structures such as the sternum, vertebra, and trachea (Fig 3)." In other words, Ko teaches that possible matching images are found using the anatomic structures and not registration over two studies of the lung to perform trend control. This distinction is brought up to identify the next link in the Examiner's argument. The application indicates, as well as telephone interview with the applicant's representative, that the image from one study is registered from another study (second image) which has a temporal gap, or as the applicant's original specification states "older stored images" (PG-Pub Paragraph 0033). Thus the analysis performed by the claimed invention is directed towards an analysis over time.

The cited portion of Ko continues on to teach that the "...centroid of the trachea can be shifted secondary to atelectasis or an adjacent mass and may not be a consistent landmark for registration," and that the "...most medial, lateral, anterior, and posterior pixels of each lung were also identified and registered as were the centroids of the individual and combined lungs." These teachings are found in the section titled "Analysis of change over time."

Thus, it is the Examiner's position that while the sternum, trachea, vertebrae and lungs are used to identify possible matching images in follow-up studies, they are not used for registration in the task of trend control (how the nodules within the lung change over time). It is the Examiner's position that the registering for trend control is performed using image data related to the medial, lateral, anterior and posterior pixels of each lung and the centroids of the individual and combined lungs or in other words the lungs (and associated data) is used to register the two images.

The Examiner's position is deemed broad and reasonable as the Examiner has used the applicant's originally filed specification to interpret the claims (both images are of the same patient at different time and not consecutive). In view of the explained Ko's teachings, it is believed that Ko shows registering only relevant (lung) constituents (medial, lateral, anterior and posterior pixels) which is relevant to trend control of lung tumors.

The same line of reasoning applies to claims 9, 18 and 20 as well.

Continuation of 13. Other: Continuation of 7. The claims would be rejected as presented in the Final Office Action dated 8/18/2011 as there are no claim amendments.